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ABSTRACT

This guide is first of a series of curriculum guides dealing with nutrition education in grades K-6. The curriculum guide was designed to incorporate knowledge of thirteen concepts into the child's decision-making processes as a food consumer. These concepts, as covered by the guide, are: affecting bodily well-being through nutrition; affecting dental health through nutrition; models for diet selection; controlling bacterial growth in foods; how to keep foods safe temporarily; treating foods to prolong safe usage; ethnic food traditions; family food customs; effects of peer influence on food habits; effects of advertising on food choices; supply of money affects food choices; accessibility of food affects food choices; preparing foods in different ways. Each concept is taught in one lesson which can usually be accomplished in about a half hour. Several duplication masters are included. (RE)

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Making Nutrition Education Count

A GUIDE FOR NUTRITION EDUCATION K-6

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VOCATIONAL-TECHNICAL DIVISION

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Making Nutrition Education Count A Guide for Nutrition Education K-6

JULY 1975

Prepared by Patricia Kratky, R.D. and Lois Haigh with assistance in development of the curriculum format from LaVonne Elsbernd.

The curriculum has been developed as a Pilot Project with funds provided by the Minnesota State Department of Vocational Education under the direction of Audrey Grote, Vocational Program Supervisor, Consumer-Homemaking, in cooperation with the Clay County Vocational Cooperative Center. The project administrator was Melvin O. Salberg.

CLAY COUNTY VOCATIONAL COOPERATIVE CENTER
2323-16 Avenue South, Moorhead, MN 56560

We wish to thank the K-3 teachers in Barnesville, Dilworth, Glyndon-Felton and Hawley elementary schools for their consideration and help during the testing period for the project.

Special thanks are extended to Thomas Sandhei, principal, and the faculty at Sharp Elementary school in Moorhead for their time and effort in teaching these lessons as a part of the testing process.

Many suggestions from all of these teachers have been incorporated into the lessons contained in this curriculum.

When duplicating these materials please give credit to Clay County Vocational Cooperative Center and the authors -- Thank you.

CLAY COUNTY VOCATIONAL COOPERATIVE CENTER
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Moorhead, MN 56560

MAKING NUTRITION EDUCATION COUNT

Only a half century ago, the science of nutrition was born in test tubes and animal experiments. Early knowledge demonstrated the effect of nutrition on health with remarkable clarity. Recent research has expanded the consequences of inadequate nutrition. Using recent accurate information to influence personal habits demands that the information be presented to every individual in an understandable and meaningful manner.

An infant's eating patterns becomes the adult's eating habits. The longer an imperfect pattern is continued, the more difficult it becomes to incorporate accurate information into the pattern. Helping the *elementary* student to incorporate accurate nutrition information into his life style becomes the goal of nutrition education.

Today's child has significant control over his eating pattern. Breakfast foods are often chosen by children. Family values toward sleep and family schedules may force the child to prepare breakfast for himself. Pocket money is often spent for self-selected snacks and meals. Some children prepare meals when the pressure of family schedules allow only individual sandwich meals. Nutrition education must influence these existing areas of decision for children to be meaningful to them.

WHAT IS NEEDED

Many factors influence an individual's dietary decisions. Thirteen of these factors were included in the concepts for this curriculum. While the concepts are related to each other, a given progression is not necessary to build to the final decision-making skill. The concepts follow groupings: affecting the health of the individual, the individual's social background and the individual's personal resources.

CONCEPTS AFFECTING THE HEALTH OF THE INDIVIDUAL

Affecting bodily well-being through nutrition
Affecting dental health through nutrition
Models for diet selection
Controlling bacterial growth in foods
How to keep foods safe temporarily
Treating foods to prolong safe usage

CONCEPTS AFFECTED BY SOCIAL BACKGROUND

Ethnic food traditions
Family food customs
Effects of peer influence on food habits
Effects of advertising on food choices

CONCEPTS AFFECTING PERSONAL RESOURCES

Supply of money affects food choices.
Accessibility of food affects food choices
Preparing food in different ways

HOW TO FIT IT IN

Each concept is taught in one lesson which usually is finished in slightly more than one half hour. More than one concept is taught in some lessons. The primary grades develop awareness in each of the factors influencing nutrition. The upper elementary grades apply and strengthen this awareness.

Concepts affecting health integrate into existing curricula for health and science. Careers in health and food production are also identified.

Each grade level has a different set of activities designed for that grade level's interests and traditional activities. Each activity builds upon skills gained in the preceding grade's activity for that concept. These are exemplary lessons and may need to be adapted for use in a specific classroom.

Each lesson involves an activity. All activities involve oral communication skills. Some activities use illustrative, dramatic, or written skills. The skill required by the activity depends upon the students level of knowledge.

SYMBOLS

Each lesson plan uses symbols to indicate

materials needed

reference materials for student use -- books in large italic capitals -- films, filmstrips, pamphlets in italic.

outline of teaching procedure

outline of student activities

BACKGROUND INFORMATION for the teacher's use and RECIPES are included when necessary.

EQUIPMENT

Each school should make available to every classroom upon need:

dish sponge
mild detergent
wax paper
several sets of graduated measuring cups and spoons
liquid measuring cups
paper towels
large bowl (4 quart)
small bowl (2 quart)
large stirring spoon
covered pitchers
rubber scrapers
hot pads
electric fry pan or selection of covered saucepans and hot plate
manual can openers
disposable dishes and silver as needed
laminated National Dairy Council Food Models

Other equipment will be needed as each lesson indicates.

Plans for a portable mini-kitchen will be available after January 1, 1976.

MAKING NUTRITION EDUCATION COUNT

KINDERGARTEN

LESSON CONCEPT	PAGE NUMBER
Models for diet selection	K-1
Affecting dental health through nutrition	K-2
Food traditions of ethnic families	K-4
Effect of peer influence on food habits	K-6
Effect of advertising on food choices	K-11
Controlling bacterial growth in food	K-12
How to keep food safe temporarily	K-14
Treating foods to prolong safe usage	K-15
Accessibility of food affects food choices	K-16
Affecting bodily well-being through nutrition	K-18
Preparing foods in different ways	K-20

CONCEPT: Models for diet selection

GENERALIZATION: Familiarity with many different foods from the four food groups aids in planning nutritious meals.

BEHAVIORAL OBJECTIVE: The student will name, describe, and taste some less familiar foods from each of the four food groups.

* *

--A selection of some foods which are likely to be less familiar to the students. Suggestions:

MILK GROUP
cheese
powdered milk

MEAT GROUP
dried beans
(Texturized Vegetable Protein)

FRUITS AND VEGETABLES GROUP
broccoli
brussels sprouts
cauliflower
zucchini
apricots
avocado
coconut

BREADS AND CEREALS GROUP
tortilla
macaroni products

These are often available from school lunch people.

NOTE: If the school lunch is planning to introduce a food, this could be used.

--Assemble foods. Wash thoroughly. All of the suggested foods can be eaten uncooked. Prepare the foods for tasting. In some groups the students may be able to help with washing, cutting, and getting ready for the food tasting experiences.

For each food selected: show it to the students, ask if anyone can name it, can anyone describe its taste, or has eaten it. Spend enough time with each food so that everyone has an opportunity to touch, smell, taste, and describe their feelings about the food. You will want to talk about color, texture, flavor (bitter, sweet, sour, bland, salty) and smell.

--Describe foods.
Help prepare foods for tasting.
Taste and describe each of the foods.

CONCEPT: Affecting dental health through nutrition

GENERALIZATION: The risk of dental cavities is not as great if snack foods without added sugar are eaten.

BEHAVIORAL OBJECTIVE: Students will name sugar free snack foods.

* *

--A selection of naturally sweet foods:

pineapple	fresh pears	bananas
raisins	figs	unsweetened fruit juices
carrot sticks	juice packed canned fruits	

--*Fruits I Like* (puzzle)
Playskool -- Milton Bradley Toys

--Talk about snacks. Let children name the snacks they like to eat. Ask them why they like candy and other sweets for snacks. Talk about "sweets" and what makes a food taste sweet. Help them understand that candy and many other sweet snacks are poor choices because a lot of sugar is added. Unless they can eat these foods right after a meal and then brush their teeth, it is better to choose a snack without added sugar.

Direct students in preparing "tasting bee" of snacks.

--Prepare and taste sugar free snack foods.
Identify the flavor of foods tasted.
Name some other naturally sweetened foods.

BACKGROUND INFORMATION

Adapted from K.O. Madsen, "Frequency of Eating and Dental Health," FOOD AND NUTRITION NEWS, March-April 1975.

In the diet of the school-age child, the chief thing to remember as far as dental health is concerned is to cut down on the amount of sugar and sweet foods eaten. Many years of research have shown that carbohydrates, principally sugars, are a major factor in causing tooth decay. Within a few minutes after sweets are eaten, bacteria usually present in the mouth act on the sugar to form acids that can dissolve tooth structure.

It is important to learn the types of foods or other between-meal items that are compatible with health. For example, wise snacking can provide adults and children with added nutrients and necessary calories for age or lifestyle needs without excessive dental hazards.

The same four food group guide used to plan meals is useful also for planning snacking habits. Note in the guide below that it is better to use some foods only at mealtime. Some non-food items need to be modified or eliminated. To prevent cavities, it is most important to avoid any habit that frequently exposes the oral cavity to fermentable carbohydrates.

CHOOSING SNACKS FROM THE FOUR FOOD GROUPS

	GOOD SNACKS (When eaten without adding sugars)	BETTER WITH MEALS*
Dairy Group	Milk, whole, low-fat, skim or buttermilk; All cheese including cottage cheese; Plain yogurt; Some dips & spreads (see label); Some chocolate drinks (see label)	Chocolate milk; Malts; Shakes; Ice Cream; Sweet or fruited yogurt
Meat Group	Meats of all kinds including luncheon meats and left-overs; Nuts of all kinds; Hard cooked eggs; Smoked meats; Some bean dips and peanut butters (see label)	Some meats prepared with sugars (see label); Candy-coated nuts
Fruit and Vegetable Group	All raw, fresh, frozen or waterpack fruits or vegetables or their juices prepared without addition of sugar (see label) ; dill pickles; olives	Sweetened canned goods, juices or drinks; Dried fruits, e.g. raisins sweet pickles
Bread and Cereal Group	Popcorn	Breads and cereals of all kinds; Crackers; Chips; Pretzels; Caramel corn; All sweet baked goods

CHOOSING NON-FOOD GROUPS FOODS AND OTHER ITEMS

SUITABLE BETWEEN MEALS	UNSUITABLE BETWEEN MEALS*
Sugarless gum, candy or soft drinks; Dill or sour pickles; Olives; Unsugared coffee or tea; Some breath sweeteners (see label); Some antacid gums or tablets (see label)	All sugared gums, candies, mints, soft drinks or other sweet liquids; Sweet pickles; Jams, jellies, jello, or sherbets made with sugar; Most cough drops or sugared pharmaceuticals

*The slow or continual sipping, chewing, sucking or nibbling of these items makes them especially hazardous to dental health. Even if consumed rapidly, they should be followed with brushing, flossing, or at least mouth-rinsing.

CONCEPT: Food traditions of ethnic families

GENERALIZATION: Chippewa and Sioux Indian families in Minnesota prepare native foods for special occasions.

BEHAVIORAL OBJECTIVE: The student will prepare and taste traditional Chippewa and Sioux Indian foods.

* *

--Recipes (attached)

-*INDIAN RECIPES*
United Tribes Employment Training Center
3315 South Airport Road
Bismarck, ND 58501

MINNESOTA CHIPPEWA INDIANS: A HANDBOOK FOR TEACHERS
Upper Midwest Regional Education Laboratory

--Use these recipes to prepare with the children when you are studying Indians or perhaps include these with Thanksgiving activities.

--Help prepare and taste Indian foods.

BACKGROUND INFORMATION

The Chippewa and Sioux did not make leavened bread until the settlers brought flour and leavening agents into the area.

The original bread produced was a flat pattie of fat mixed with ground corn or wild rice. Sometimes tart wild berries were added and sometimes both berries and jerky were added to the mixture. The name for this mixture is wa-sna in the Sioux language.

Chippewa Bannock bread was made after flour became available. It may be shaped by coiling around sticks, patting into a frying pan and bake over a campfire. Sometimes other flours are mixed with white flour. Most commonly white flour is used alone.

CHIPPEWA BANNOCK
(Indian Bread)

EQUIPMENT

Mixing bowl
Large stirring spoon
Electric skillet or cooking fire with pan
Hot pads

FOOD

2 cups flour
1 tablespoon shortening
1 cup sour milk
¼ teaspoon salt
1 teaspoon soda in ½ cup water

Combine all ingredients and mix in flour.
Pat into large circle in greased heavy skillet.
Bake for 35 minutes by coals of a hot fire. (This is for the adventuresome teacher who has an opportunity and facilities for an open fire.)
Or bake in a greased hot electric fry pan for 30 minutes. In a fry pan you may need to turn the bread.

PARCHED CORN
(Makes about 1½ pints)

EQUIPMENT	FOOD
Electric fry pan or equivalent Hot pads Large stirring spoon	2 ears dried corn (Indian or colored corn can be used)

Remove dried corn kernels from the cob. Place in a very hot skillet.
Cover, and parch stirring occasionally for ten minutes.
Serve hot or cold.

WA-SNA
(Corn Cake)

EQUIPMENT	FOOD
Electric fry pan Large stirring spoon Large bowl 9 x 13 cake pan or cookie sheet Pancake turner	3 cups parched corn (use white corn meal) 1½ cups sugar 2 cups tallow, shortening, or margarine

Grind parched corn, or heat corn meal in skillet until very browned, stirring frequently. Do not burn.
Pour into bowl.
Add fat, sugar, and mix, more fat may be added if necessary.
(One cup of raisins or dried berries may also be added.)
Press into a rectangular pan, cool. Cut into squares.

CONCEPT: Effect of peer influence on food habits

GENERALIZATION: Example of others is an effective method of learning manners.

BEHAVIORAL OBJECTIVE: The student will participate in a role play situation using puppets to demonstrate acceptable mealtime behavior.

* *

--Script for puppet play (attached)
Mask for mother and puppet pattern (attached)
Table setting puzzle (attached)
Rhythmic activity (attached)

--*MANNERS CAN BE FUN*
Monroe Leaf
J. B. Lippincott Co.
Philadelphia, PA

ETIQUETTE -- YOUR TICKET TO GOOD TIMES
Helen Hall
Franklin Watts, Inc.
575 Lexington Avenue
New York, NY

ALEXANDER'S BREAKFAST SECRET (filmstrip)
Cereal Institute, Inc.
135 South LaSalle Street
Chicago, IL 60608

--Make puppets.
Construct table setting puzzle.

Read script for puppet play.
Teacher plays Little Thing and Mother.

Teach rhythmic activity. Demonstrate setting a table using puzzle. Discuss some ways of improving manners at breakfast and the importance of breakfast itself.

--Suggest good manners to Little Thing.

Practice table setting with puzzle and/or dishes from play house. Role play table manners. Participate in rhythmic activity.

ADDITIONAL ACTIVITY: Plan a breakfast using foods from the four food groups. Invite room mothers to prepare the breakfast with the students assisting them. The students can demonstrate their knowledge of etiquette by setting an attractive table, serving and eating breakfast using good manners.

INSTRUCTIONS FOR TABLE SETTING PUZZLE

Cut out attached pictures of food and dishes. Attach flannel to the backs and use as a flannel board puzzle. A puzzle can also be made by arranging the pictures on a large piece of tag board. Laminate and cut out the pictures leaving background as a frame for the puzzle.

A BREAKFAST BATTLE

Scene: Using tablesetting puzzle, set table for a cereal, milk, and juice breakfast. Use bowl, spoon, and glass

MOTHER: Little Thing, come to breakfast. (No answer.) Little Thing come to the table this minute!

LITTLE THING: (Finally answers Mother.) I don't want any breakfast. I hate cereal -- soggy cold cereal again! I hate breakfast.

MOTHER: Sit down this minute. You've got to eat something. (Little Thing sits down and slouches.) Sit up straight, Little Thing.

LITTLE THING: Gimme a peanut butter sandwich.

MOTHER: (Makes sandwich. She sets table with bread, peanut butter, plate, knive.) You better eat it fast. You're going to be late for school.

LITTLE THING: (Eats sandwich and talks with food in mouth -- mumble, mumble -- 10 cents.)

MOTHER: Don't talk when you have food in your mouth!

LITTLE THING: (Reaches for the sugar bowl.) Maybe sugar will taste good on my peanut butter sandwich. (Spills sugar.)

MOTHER: Ask for things to be passed. Look at that mess!

LITTLE THING: Gotta go! (Slam door.)

MOTHER: What am I going to do?

Teacher helps children solve mothers problem by leading them to pick out Little Thing's bad habits and the way to change them.

RHYTHMIC ACTIVITY

Mother's Voice

Wake up Fred!
(rub eyes)

It's time to get out of bed.
(stretch and yawn)

The sun is shining.
(make big circle over head with arms)

Come quickly, breakfast is waiting.
(run in place)

Children's Voice

What will it be?
(scratch head)

Pancakes with syrup and bacon for me?
(flip pancake)

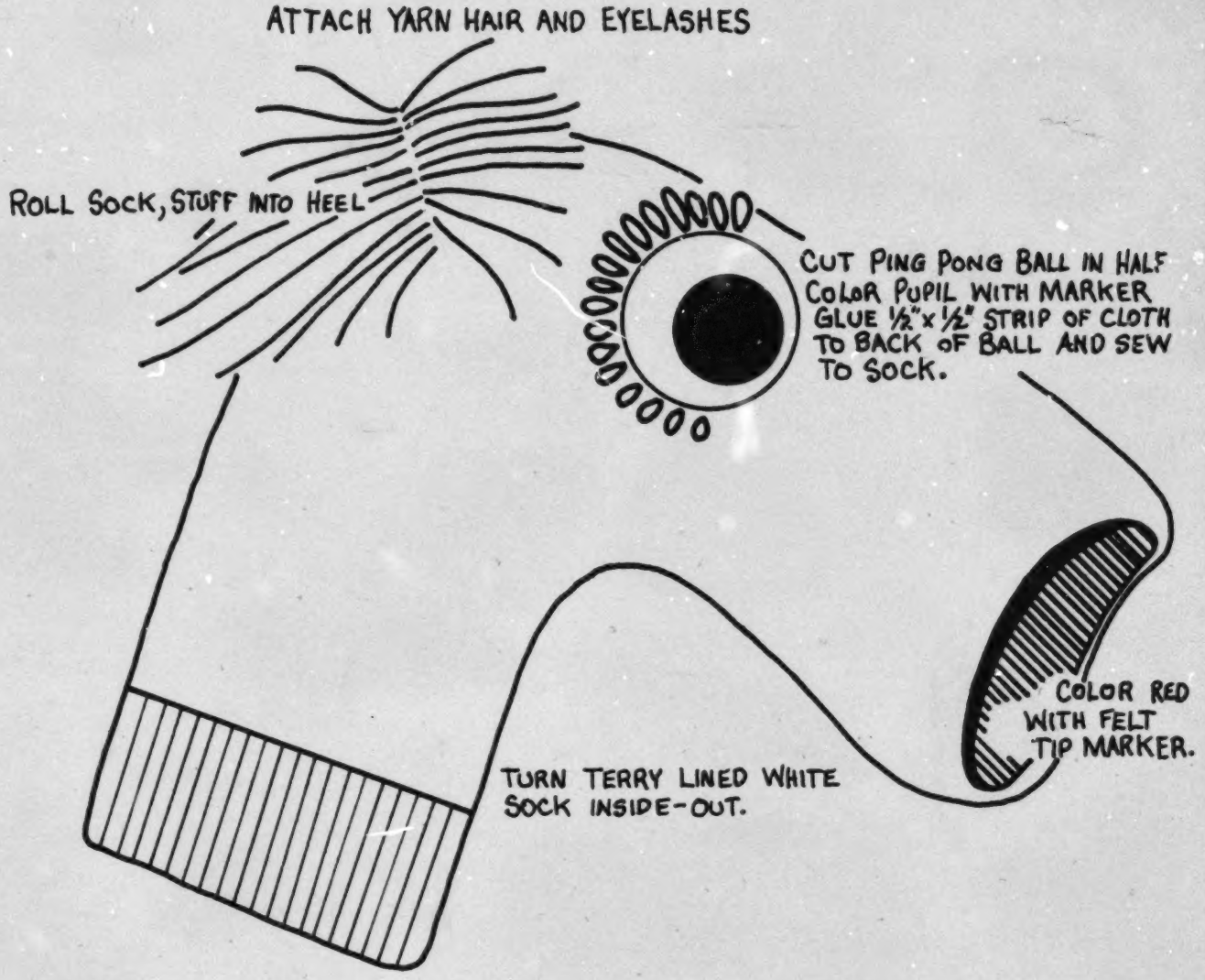
Or something that's simple and fast --
Tomato juice, milk, and cereal.
(pour cereal and milk in bowl)

Or the one I like most,
Cocoa, o.j.*, and peanut butter toast?
(with hand on head push self down and pop up)

Oh, look it's.....
(children call out their favorite breakfast)

*o.j. = orange juice

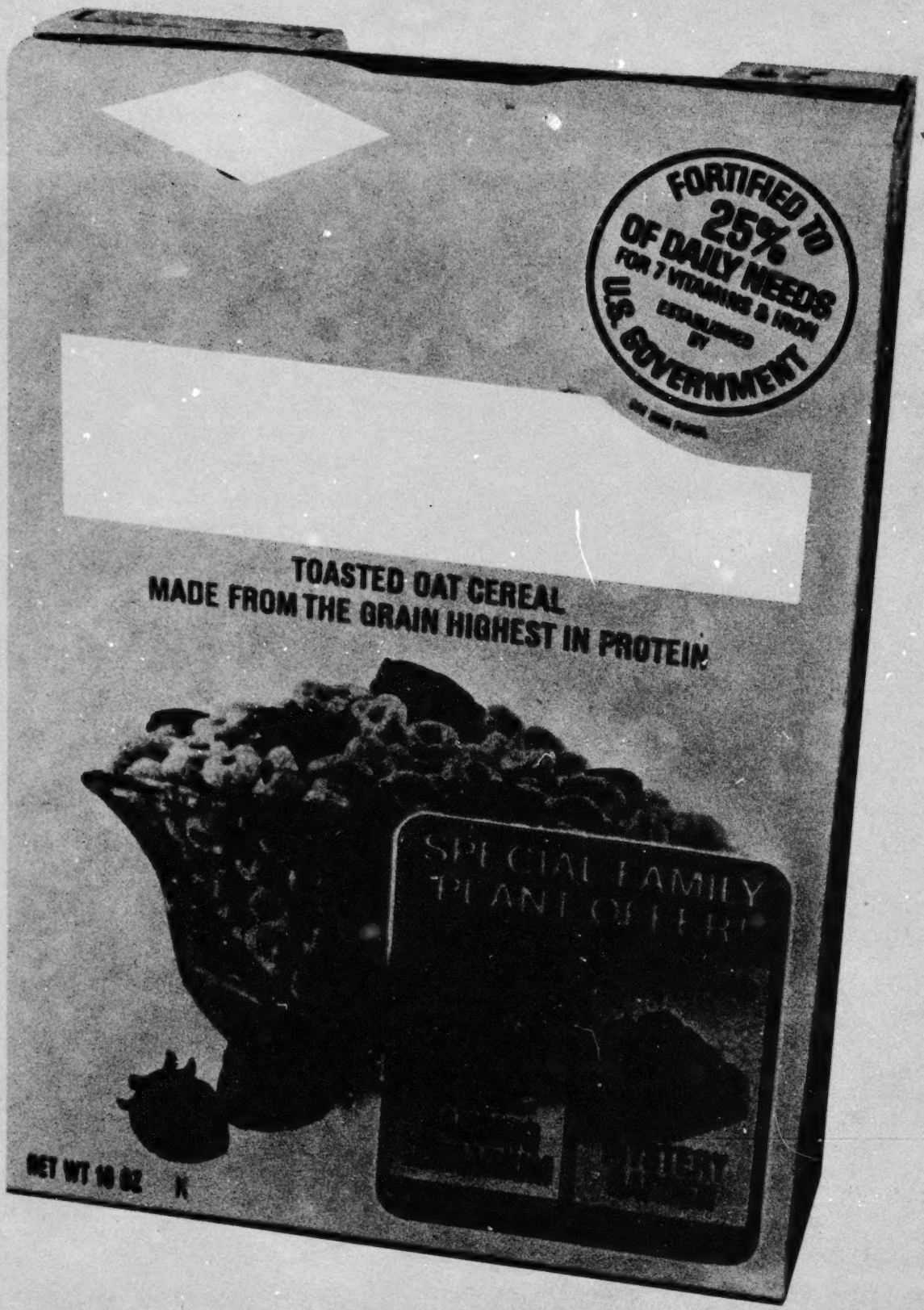
DIRECTIONS FOR MAKING 'LITTLE THING' PUPPET



USE HAND TO MANIPULATE PUPPET

PASTE STICK ON BACK OF THE MASK.

PASTE MASK TO HEAVY PAPER AND COLOR FEATURES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FOR 7 VITAMINS & IRON
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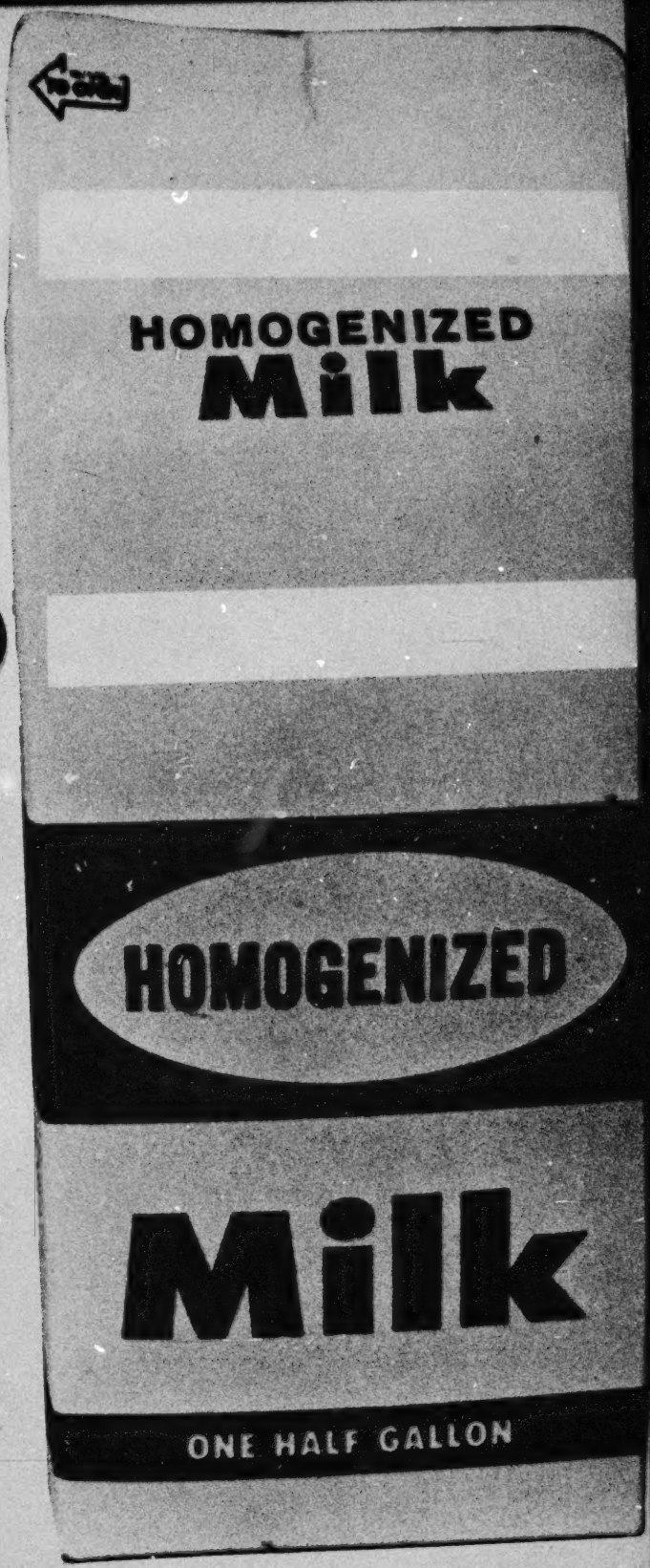
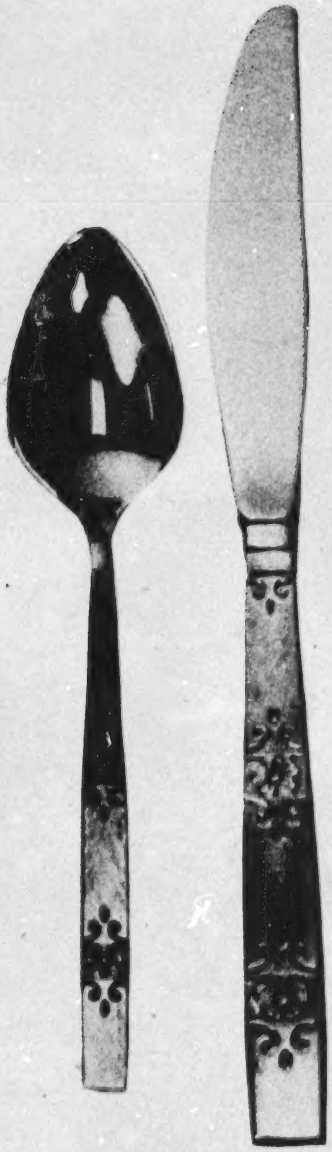
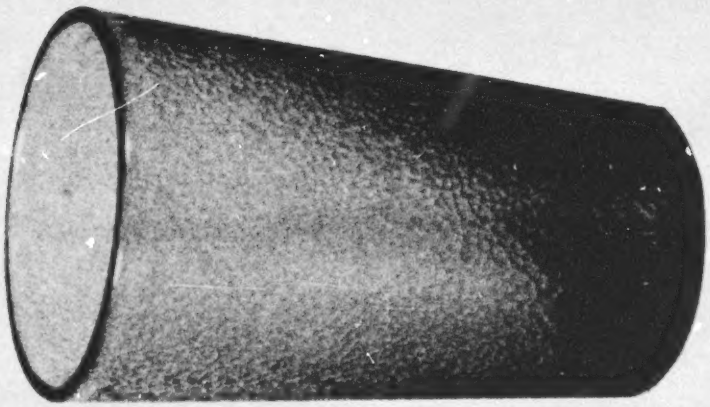
BY
U.S. GOVERNMENT
TOASTED OAT CEREAL
MADE FROM THE GRAIN HIGHEST IN PROTEIN
SPECIAL FAMILY
PLANT OFFER
NET WT 10 OZ

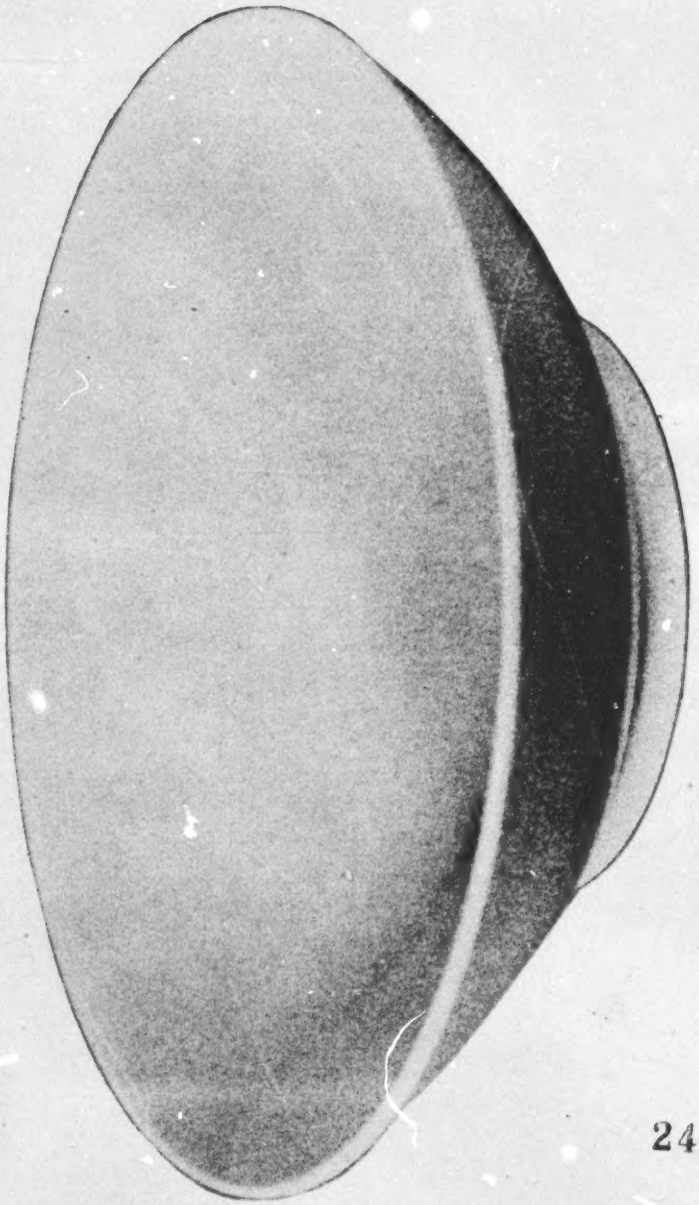
CREAMY
peanut butter
NET WT. 18 oz
(1 LB. 2 OZ.)
STORES, INC.
SHASKA, MINNESOTA 55318

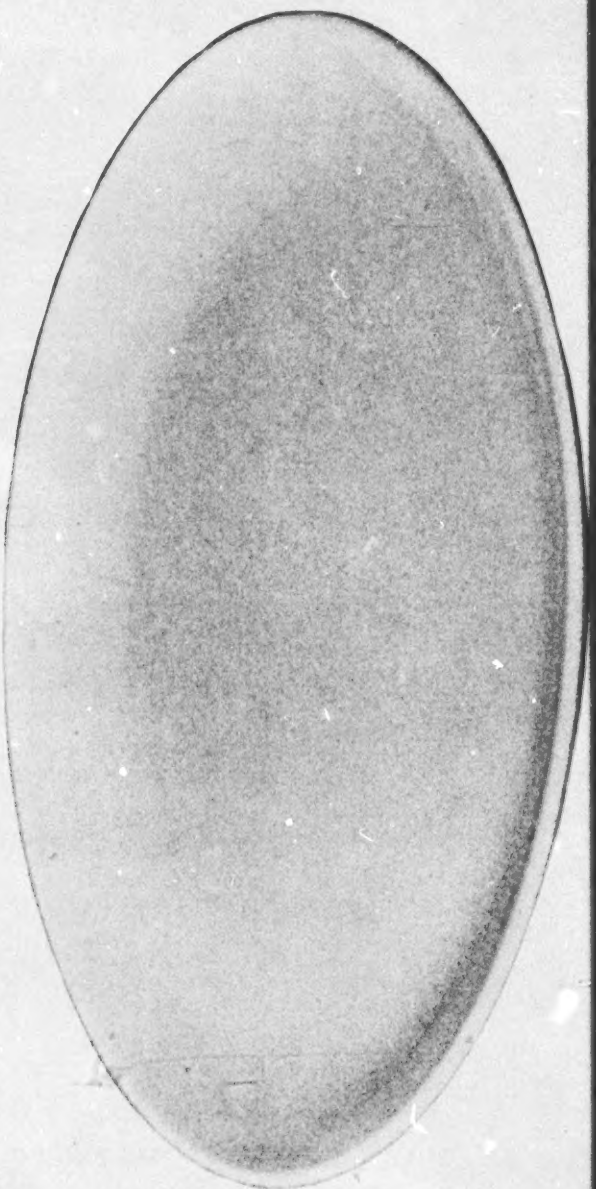

HOMOGENIZED
Milk
HOMOGENIZED
Milk
ONE HALF GALLON

unsweetened
PEFRUIT JUICE
NET 46 FL. OZ.
(1 QT. 14 FL. OZ.)









CONCEPT: Effect of advertising on food choices

GENERALIZATION: Advertising which is directed toward children is an influential factor in affecting food choices and preference for food products.

BEHAVIORAL OBJECTIVE: The student will indicate preferences in breakfast cereals and give reasons for the preferences.

* *

--At least four breakfast cereal boxes, choose some well advertised brands and at least one not frequently advertised

--Hold a class discussion by asking the following discussion questions: What is your favorite kind of breakfast cereal? (Let children mention one each.) Show the cereal boxes one at a time. Ask how many have tasted it. How many liked it? Is the cereal good for you? Why or why not? Where did you find out about it being good (or not) for you? Think of a time when you've asked for a certain kind of cereal. Why did you want that kind? Have you ever thought about why the people who make cereals advertise them? What do the ads tell you? Can you always believe everything the ad tells you? Why or why not?

--Take part in the class discussion of advertising and the ways it affects choices in selection of breakfast food.

ADDITIONAL ACTIVITY: Through the school lunch you may be able to obtain cereal to prepare with the children. A cooked cereal such as otameal, cream of wheat, or bulgar (recipe attached) might be good. Fruit such as raisins, peaches, or others added to cooked cereal may tempt the students in trying something new.

BULGAR CEREAL

(Makes 5 cups of cooked Bulgar)

6 cups water
1 teaspoon salt
2 cups bulgar

Bring the water to a boil and add salt. Put the bulgar into a fine sieve and run water over it. Add the bulgar to boiling water. Stir until it boils again. Cover the pan and cook over low heat for 20 minutes. You can eat it hot or use it in other ways.

NOTE: Bulgar is also good in homemade bread.

CONCEPT: Controlling bacterial growth in food

GENERALIZATION: Children as well as adults need to be aware of sanitation practices required when preparing and serving food at home as well as in school.

BEHAVIORAL OBJECTIVE: The student will visit the school lunch cook and learn about the sanitary methods used when preparing and serving food.

* *

-Rhythmic activity (attached)

-*"Babbit's Eating Habits"*
Pictures 6 and 8
McGraw Hill Study Print
330 -- 42 Street
New York, NY 10086

GAMES FOR THE VERY YOUNG
Elizabeth Matterson
American Heritage Press
New York, NY

--Arrange with school lunch cook to show students the lunchroom and the methods used to handle food which is served for school lunch. Ask the cook to explain the reasons why sanitary precautions are necessary.

NOTE: Some suggested precautions for the school lunch cook are: dishwashing machines, special detergent sink in the kitchen for washing hands, covered garbage cans and garbage disposal, can opener kept spotlessly clean, large refrigerator to keep food cold, cooks wear clean white uniforms and hair nets, gloves used to serve finger foods like potato chips.

Prepare students for a trip to the school lunchroom.

Help students understand that they too need to wash hands before they handle or eat food. Practice washing hands using soap.

--Visit school lunchroom.
Practice handwashing.
Draw pictures of what you saw on the trip to the lunchroom.
Rhythmic activity.

RHYTHMIC ACTIVITY

*OPEN, SHUT THEM

"Games for the Very Young"

Open, shut them -- open, shut them
(open hands, close fingers over palms)

Give a little clap
(clap)

Open, shut them, open, shut them

Lay them in your lap
(lay hands in lap)

Creep them, creep them, creep them

Creep them, right up to your chin
(creep fingers from lap to chin)

Open wide your little mouth

But do not let them in
(shake head in negative manner)

From *GAMES FOR THE VERY YOUNG*

CONCEPT: How to keep food safe temporarily

GENERALIZATION: Some foods are refrigerated to preserve their quality and keep them safe to eat.

BEHAVIORAL OBJECTIVE: The students will identify some foods that must be stored in the refrigerator.

* *

-Large sheet of white paper
White cardboard or tagboard
Collection of milk product cartons and labels

--*"Food and Nutrition Teaching Pictures"*
Resource Sheet No. 6
David C. Cook Publishing Company
Elgin, IL 60120

"Care of Milk in the Home" (teacher reference)
Agricultural Extension Service
University of Minnesota
St. Paul, MN 55101

--Paste a sheet of white paper on the wall to represent a refrigerator. Shelves can be drawn on it with a felt pen. Make the door of cardboard, and hinge it so it can be opened. A handle can be drawn on the door. Direct students taking turns placing the empty cartons, and labels in the refrigerator.

Take the class to the lunchroom to see where the milk is refrigerated.

During a milk break, talk about the refrigeration of milk and other foods. Ask the children to name some foods which are kept in the refrigerator. Tell them that when foods from the refrigerator are used it is important to return them quickly so they will be safe to use again.

--Take a trip to the lunchroom to see where milk used at the school is refrigerated. Paste foods that need to be refrigerated in the wall refrigerator.

ADDITIONAL ACTIVITIES: Leave some milk out in the room for several days. Taste and smell it from time to time.

Take a trip to the supermarket to see the dairy cases. Note the refrigeration system used and call attention to thermometers in cases.

CONCEPT: Treating foods to prolong safe usage

GENERALIZATION: Drying is a method used for preserving many fresh foods.

BEHAVIORAL OBJECTIVE: The students will taste foods that have been dried.

* *

--Raisins
Other dried fruits

--*"Drying Foods at Home"* HN 14, (pamphlet – teacher reference)
Agricultural Extension Service
University of Minnesota
St. Paul, MN 55101

--Put a few raisins in a bowl and have the children identify them. Ask if anyone can tell you where raisins come from. (They are dried grapes.)

Each child is to taste a raisin. Ask if they taste or look like grapes.

Dry grapes in the classroom (directions attached).

Examine and taste other dried fruits.

--Taste raisins.
Talk about differences between dried grapes (raisins) and regular grapes.
Dry grapes to make raisins. Watch the changes which take place.
Plan to tell your parents about drying foods as a way of preserving food.

STEPS IN DRYING GRAPES

Use any seedless variety of grapes. Wash and leave whole. Remove all defective fruit. Remove stems.

There are two methods of drying. Sun drying depends on three things: HEAT (days when the sun is shining brightly are best); DRYNESS of the air; and CIRCULATION of the air.

Fruits (and vegetables) to be dried are spread on trays. The trays are placed out of direct sunlight either flat or raised on one side facing the sun. Drying in direct sunlight may dry skin too fast and toughen them. Several days are sufficient to make the fruit 2/3 dry. Then stack the trays and continue drying until leathery.

Another drying method is controlled heat drying. Using older gas ovens, keep the door propped open eight inches during drying; with electric and newer gas ovens, prop door open about ½ inch at the top. The temperature must be kept no higher than 150°. Stir the food often on the trays. Dry until pliable and leathery. Raisins will take 6 hours or longer to dry in the oven.

CONCEPT: Accessibility of food affects food choices

GENERALIZATION: It is possible to save money by using fruits and vegetables which are grown in home gardens.

BEHAVIORAL OBJECTIVE: The student will plant seeds taken from fruits and/or vegetables in mini-gardens and associate the growing of foods with food purchased in the market.

* *

--Rhythmic activity (attached)
Some fruits and vegetables with seeds which are easy to see, such as:

tomatoes	apples	pears	peaches
plums	avocado	watermelon	pumpkin
dried peas	dried beans	oranges	grapefruit
lemons			

Container that will hold soil
Rich planting soil

--*A GARDEN IS GOOD*
Rand McNally and Company
Chicago, IL

--Teach the students the rhythmic activity.

Choose several fruits and/or vegetables. Cut them open. Examine the inside of the fruit carefully with the children, especially noting the seeds.

Plant a mini-garden using some seeds saved from fruits and vegetables.

Lead the children to the conclusion that by planting these seeds similar plants should grow and produce more fruit.

Also help them conclude that fruits and vegetables purchased by their parents at the market come from plants started from seeds.

NOTE: By examining the fruit and/or vegetable and tasting them and describing color, flavor, and texture, this can be used as a sensory experiment for the students.

Read *A GARDEN IS GOOD* to the children.

--Examine fruits and vegetables with teacher.
Plant mini gardens.
Do rhythmic activity.
Make collage using seeds of foods.

RHYTHMIC ACTIVITY

Plant a tiny seed in a little dark hole.
(poke finger into fist)

Carefully cover it with soil.
(cover fist with other hand)

Give it water and put it in the sun.
(pour toward floor -- arms in a circle)

Watch it grow – into such a big one.

Look! The pretty green peas are waiting.
(do double take or make spectacles with hands)

Hurry bring a basket for picking.
(make circle with arm, put peas in)

Cook in a pot; but not too long.
(hold pot handle)

And eat them to grow big and strong.
(feed self)

CONCEPT: Affecting bodily well-being through nutrition

GENERALIZATION: In order to feel good and perform daily tasks to the best of one's ability, energy producing foods are needed by the body.

BEHAVIORAL OBJECTIVE: The student will compare the energy needed to move a train to food which supplies the body's energy needs.

* *

--Materials to construct a train (directions attached)

--*Food Models*
National Dairy Council
111 North Canal Street
Chicago, IL 60606

--Construct the milk carton train or draw a train with four cars to be placed on the bulletin board.

Ask: How many have ever ridden on a train?
What was your train ride like?
What makes the train go?

"Let's take a train ride today."

Help the children form a train by lining up single file, hands on the hips of the person in front. You are the engineer. The train begins to move slowly around the room (or playground) picking up momentum then slowing down when it runs low on fuel. After refueling it again moves about the room, etc.

When the train ride is over, talk about what happened when the train ran out of fuel. What do trains use for fuel?

Point out that boys and girls and grown-ups too run down sometimes. Ask them when it happens. (When a meal is skipped, when they eat too little, come to school without breakfast, or eat the wrong kind of foods such as coke and candy.)

Food is the fuel people need to keep going, feel good, and do the things they have to do to the best of their ability.

Develop the concept that trains use fuel for energy and people use food for energy.

Direct the children in placing foods (food models or food pictures cut from magazines or drawn by the children) which give them energy in the cars of the train. The foods can be grouped in the cars according to common origin, e.g. foods from the cow, foods from grain, foods from other plants and animals.

--Take a train ride.
Discuss fuel used by train and food as fuel for people.
Place foods in the train made by the teacher which supply the energy to make people go.

DIRECTIONS FOR CONSTRUCTING MILK CARTON TRAIN

You will need:

- 4 empty ½ gallon milk cartons
- 1 empty ½ pint milk carton
- 1 empty 6 ounce juice can
- 1 round oatmeal or cornmeal box
- Colored paper
- Paste

Cover the four ½ gallon milk cartons with colored paper to make the train cars.

Cover the oatmeal box, juice can, and ½ pint carton with black paper. Cut half way around the edge of one end of the round box. Fold cut part in half to form the cow catcher. Cut a hole in the top of the oatmeal box toward the front, attach juice can to form smokestack. Cut slits near the back of the box, attach ½ pint carton to form engineers cab. The bottom of the box may need to be cut off slightly so the engine will be stable.

Wheels may be cut out of black paper or drawn on with felt-tip pen.

CONCEPT: Preparing foods in different ways

GENERALIZATION: Many foods can be prepared and eaten in several different ways which add variety and interest to meals and snacks.

BEHAVIORAL OBJECTIVE: The student will prepare and taste a salad made with a selection of fresh vegetables.

* *

--Salad vegetables

lettuce
fresh spinach
red/green cabbage
endive
romaine
escarole
cauliflower
green pepper
finely sliced celery
chopped tomato
carrots -- sliced

--*"Plants That Provide Food"* (teaching pictures)
The Child's World
Elgin, IL 60120

I LIKE VEGETABLES
Sharon Lerner
Lerner Publishing Company
Minneapolis, MN 55400

--Direct children in making salad. Wash greens, tear into bite size pieces. Mix ingredients for the dressing. Shake in covered container.

Salad can be tasted with and without dressing. Ask how adding dressing changes the flavor and texture. Which way do they prefer the salad, with or without dressing?

--Make salad and dressing.
Serve and taste the salad.

ADDITIONAL ACTIVITY: Color the accompanying pictures of vegetables. Decorate a bulletin board with a vegetable garden using the children's colored pictures. Arrange the garden to show how the edible part of the plants grow, e.g., above or below the ground, leaves, stems, or flowers.

SALAD DRESSING

EQUIPMENT
Covered container to shake salad dressing
Salad Bowl
Measuring cups
Measuring spoons
Spoons to toss and serve salad
Paper plates

FOOD
½ cup salad oil
2 tablespoons vinegar or lemon juice
¼ teaspoon salt, pepper
Celery seed or sesame seed if desired

Shake in covered container.